U.S. Patent Application No.: 10/685,685

Filing Date: October 15, 2003

First Named Inventor: Anthony Costa

Amendments to the Claims

This listing of claims will replace prior versions and listing of claims in the application:

Listing of claims:

1. (currently amended) A gel matrix for topical use on a subject having an

epithelial surface to be immersed in water, said epithelial surface comprising mucus, mucosa or

skin surface, the gel matrix being insoluble but dispersible in water, comprising:

- about 15% w/w polyethylene glycol-150/decyl alcohol/saturated dicyclohexyl-

methane diisocyanate copolymer, a polymer that which confers to said matrix the characteristics

of being insoluble but dispersible in water, and which is capable of adhering to said epithelial

surface,

- a liquid carrier which is bio-compatible with said epithelial surface,

- the gel matrix having an initial viscosity a viscosity, before application, of

about 35-55 centipoises.

2. - 4. (cancelled)

5. (original) The gel matrix of claim 1, which further comprises a medication.

6. (original) The gel matrix of claim 5, wherein said medication is active

towards a causative agent or a symptom affecting said surface.

7. (original) The gel matrix of claim 6, wherein said medication is one or more

anti-ulcer, anti-microbial, anti-histaminic, anti-inflammatory, soothing, wound healing, anti-

oxidant, sun screen, anti-UVs, anti-cancer, anesthetic and analgesic agents.

8. (original) The gel matrix of claim 5, wherein said medication is an organic

oil.

9. (original) The gel matrix of claim 8, wherein said oil is a plant extract.

10. (original) The gel matrix of claim 9, wherein said plant oil extract has anti-

infectious properties.

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11. (cancelled)

- 12. (currently amended) The gel matrix of claim <u>10</u>+1, wherein said <u>plant</u> oil is pine, clove, coriander or Sweet Birch oil.
- 13. (original) The gel matrix of claim 12, wherein said oil is present in a final concentration of 1-5 % (w/w).
- 14. (original) The gel matrix of claim 8, which further comprises an anti-oxidant.
- 15. (currently amended) The gel matrix of claim [[4]]1, which comprises about 15 % (w/w)ACULYN 44 TM polyethylene glycol-150/decyl alcohol/saturated dicyclohexyl-methane diisocyanate copolymer.
- 16. (currently amended) The gel matrix of claim 15, which further comprises 32-45 % glycol-comprising solvent phase and 40-53 % aqueous phase.
- 17. (currently amended) The gel matrix of claim 16, which has the following composition: ACULYN 44TM polyethylene glycol-150/decyl alcohol/saturated dicyclohexylmethane diisocyanate copolymer 15 %, ethoxydiglycol 34-45 %, oil 1-5 % and LIPOSORB L-20 TM polysorbate 20 1-6 %, demineralised water 41.17 %, propyl gallate 0.1 %, sodium metabisulfite 0.25 %, sodium carbonate 0.05 %, dye yellow 5 LK (14-16%) 0.50 %.
- 18. (new) A method of using a gel matrix on a subject having an epithelial surface, said gel matrix comprising:
- a polyethylene glycol-150/decyl alcohol/saturated dicyclohexyl-methane diisocyanate copolymer, which confers to said matrix the characteristics of being insoluble but dispersible in water, and capable of adhering to the epithelial surface to be immersed in water, said epithelial surface comprising mucus, mucosa or skin surface,

a liquid carrier which is bio-compatible with said epithelial surface,

the gel matrix having a viscosity, before application, of about 35-55 centipoises, said method comprising topically applying said gel matrix on the epithelial surface of the

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subject.

19. (new) A method according to claim 18, wherein the subject is a fish.

20. (new) A method according to claim 18, wherein the gel matrix comprises about 15% (w/w) polyethylene glycol-150/decyl alcohol/saturated dicyclohexyl-methane diisocyanate copolymer.

21. (new) A method according to claim 18, wherein said gel further comprises a medication.

22. (new) A method according to claim 21, wherein said medication is one or more anti-ulcer, anti-microbial, anti-histaminic, anti-inflammatory, soothing, wound healing, anti-oxidant, sun screen, anti-UVs, anti-cancer, anesthetic and analgesic agents.

23 (new) A method according to claim 21, wherein said medication is an organic oil extracted from a plant.

24. (new) A method according to claim 23, wherein said organic plant oil extract is pine, clove, coriander or Sweet Birch oil.